

09/613 925

### Abstract

The present invention relates to biotechnology and genetic engineering, particularly the expression of proteins of viral origin in microorganisms through their fusion, by applying the recombinant DNA technology, to bacterial peptides. The present invention provides an efficient process for the expression in *Escherichia coli* of heterologous proteins as fusion polypeptides with a view to obtaining them with a high degree of purity, in commercially useful amounts, and in an appropriate form for their inclusion in vaccine preparations intended to human use. To this effect, what is essentially used is a stabilizing sequence derived from the first 47 amino acids of the antigen P64k of *Neisseria meningitidis* B:4 :P1.15. In particular, use is made of a recombinant plasmid containing said sequence, under the control of the tryptophane promotor of *E. coli* and of the terminator of the transcription of the phage T4, including restriction sites which provide for the cloning in phase of DNA fragments coding for polypeptides of interest. The process of the invention is applicable to the pharmaceutical industry, for the development of diagnostic systems, vaccine preparations, and in any situation where it is required to obtain high amounts of heterologous proteins as fusion polypeptides in *E. coli*.